

WHAT IS CLAIMED IS:

1. A magnetic device, comprising:

a magnetic core; and

a springable winding, positioned about at least a portion of
said magnetic core, having a terminus biased against said magnetic
core.

2. The magnetic device as recited in Claim 1 wherein said
terminus is configured to be interposed between said magnetic core
and a printed circuit board.

3. The magnetic device as recited in Claim 1 wherein said
springable winding comprises a material having a spring constant
ranging from about 750 to about 2000 grams/inch.

4. The magnetic device as recited in Claim 1 wherein said
magnetic core comprises an integrally formed pedestal.

5. The magnetic device as recited in Claim 1 wherein said
2 magnetic core comprises a ferromagnetic material having a
3 composition selected from the group consisting of:

4 cobalt-iron,
5 manganese-zinc,
6 nickel-iron, and
7 amorphous nickel-phosphide.

6. The magnetic device as recited in Claim 1 wherein said
2 springable winding comprises a substantially-planar wire having a
3 dielectric insulation about said substantially-planar wire.

7. The magnetic device as recited in Claim 1 wherein said
2 magnetic core and said springable winding are substantially free of
3 an encapsulant.

8. The magnetic device as recited in Claim 1 wherein said
2 magnetic device is selected from the group consisting of:

3 an inductor,
4 a coupled inductor, and
5 a transformer.

9. The magnetic device as recited in Claim 1 wherein said
2 magnetic core comprises first and second core halves.

10. The magnetic device as recited in Claim 1 wherein at
2 least a portion of said magnetic core has an aspect ratio of at
3 least 1.6:1.

11. A method of manufacturing a magnetic device, comprising:

providing a magnetic core;

positioning a springable winding having a terminus about at least a portion of said magnetic core; and

biasing said terminus against said magnetic core.

12. The method as recited in Claim 11 further comprising forming said springable winding such that said terminus is interposed between said magnetic core and a printed circuit board.

13. The method as recited in Claim 12 wherein forming includes bending said springable winding about a mandrel.

14. The method as recited in Claim 11 wherein positioning includes positioning a springable winding comprising a material having a spring constant ranging from about 750 to about 2000 grams/inch.

15. The method as recited in Claim 11 wherein providing includes providing a magnetic core having an integrally-formed pedestal.

16. The method as recited in Claim 11 wherein providing
includes providing a magnetic core composed of a ferromagnetic
material selected from the group consisting of:

cobalt-iron,
manganese-zinc,
nickel-iron, and
amorphous nickel-phosphide.

17. The method as recited in Claim 11 wherein positioning
includes positioning a springable winding formed from a
substantially planar wire having a dielectric insulation.

18. The method as recited in Claim 11 wherein providing and
positioning include providing a magnetic core and positioning a
springable winding wherein said magnetic core and said springable
winding are substantially free of an encapsulant.

19. The method as recited in Claim 11 wherein said
positioning includes positioning a second springable winding about
said magnetic core.

20. The method as recited in Claim 11 wherein providing
2 includes providing wherein at least a portion of said magnetic core
3 has an aspect ratio of at least 1.6:1.